ISSN 0228-4111

NEWSLETTER OF THE LONDON CHAPTER,
ONTARIO ARCHAEOLOGICAL SOCIETY
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London, Ontario
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life

October 2000

00-6

HAPPY HOLIDAYS

Next speaker night is January ~~14~~ 11th and the speaker will be Neal Ferris, Ph.D. student at McMaster University. His topic is ***Natives as Newcomers: An Ethnohistory of the Fairfield Delaware.***

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As always, our meeting will be held at 8 pm at the London Museum of Archaeology, 1600 Attawandaron Road, near the corner of Wonderland & Fanshawe Park Road, in the northwest part of the city.

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ANNUAL RATES

Individual	$18.00
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Both the October meeting with Dr. Michael Stafford (speaking on The Archaeology of Denmark), and the November meeting with Drs. Ron Williamson and Susan Pfeiffer (speaking on the Uren Stage Moatfield Ossuary in Toronto), were very well attended monthly meetings with over 25 people present at each. The talks were certainly worth the price of admission as we had once again two excellent presentations which were much enjoyed by all in attendance.

Next year's speakers are not yet finalized but expect more good things. Neal Ferris will be the January speaker, his talk is entitled "***Natives as Newcomers: An Ethnohistory of the Fairfield Delaware***". February will be the traditional and perennial favourite "members night" so any members wishing to do a brief (10 to 20 minute) presentation on their recent research are urged to contact Chris Ellis (cjellis@julian.uwo.ca) – we already have two volunteers on exotic locales and topics and need two or three more (some on Ontario archaeology would not hurt!!)...due to a lack of interest and waning attendance, there will be no Christmas party this year but perhaps next year...

The cancellation of the Christmas party has led to a delay in the election of the 2001 London Chapter executive. Chris Ellis has agreed to continue as Treasurer. However, the illustrious position of President is up for grabs. Anyone who wishes to volunteer for this, or any other executive position, please contact a member of the nominating committee: Dana Poulton, Chris Ellis or Christine Dodd.

It is getting near the end of the year and although we are slightly behind in getting **KEWA** issues out, we are not doing too badly. (Of course, here is where, as always, we insert a plea for contributions to the newsletter – it is, as we have said many times, your newsletter and if you want it to work and get it on time, start submitting stuff!!!) As a result, it is time to think about renewing your subscription and especially if the label on your mailing address sticker affixed to this issue or envelope says your membership expires with 01-2001. Current membership prices are listed on the title page and as we noted many times in the past, most of those fees do go towards printing and mailing the **KEWA** with most other chapter costs being paid for out of profits from our publication series sales.

This issue we feature a series of short articles by a whole host of enthusiastic chapter members (some making their first appearance in **KEWA** but hopefully not their last) who have got together to report on some new Paleo-Indian fluted point finds (oh no, not Preceramic stuff again?; what do you expect with Ellis as an editor – besides if you want to see something on Woodland or Historic archaeology why not write it up and submit it for publication?). Oh, and happy birthday to Honorary life member and Occasional Publications Series editor Neal Ferris who has reached the big 40!!

Fluted Point Reports: Introduction

by Chris Ellis

This issue of **KEWA** includes a number of reports of Paleo-Indian fluted points, most of which have never before been reported. They include: morphological and metrical descriptions of the finds, descriptions of the stone raw materials employed, photographic documentation, and information on general location of the finds to at least county level.

Fluted points are the rarest of all projectile point forms and Paleo-Indian points in general are infrequently reported. Several studies, for example, have shown that fluted points are much rarer than even the immediately subsequent Early Archaic materials in areas such as Ohio (Payne 1982; Seeman 1994) and eastern Ontario (Roberts 1985). Although no one has compiled exact data, based on my field research and experiences in southwestern to southcentral Ontario, this generalization seems to hold here as well. For example, the University of Western Ontario Department of Anthropology received the generous donation of a large collection of well-documented and provenienced Elgin County artifactual material from the family of the late Croft Garnham about four years ago containing over 4000 formal tools of various kinds. Yet, in that whole collection, while there were numerous examples of every well know Archaic and Woodland point types, as well as several examples of relatively rare items such as pendants and bannerstones, only one Paleo-Indian point was included and that consisted of a Hi-Lo point, probably the most common of all Paleo-Indian point forms (see for example, Deller 1989).

The rarity of Paleo-Indian points is such that in the past, descriptions of individual finds was a common feature in refereed journal outlets such as Michigan Archaeologist (e.g. Dekin 1966; Wright 1981) and Ontario Archaeology (e.g. Garrad 1967; Ross 1979; Storck 1972). The reporting of several actual sites in recent years has made such reporting less popular but this does not mean that knowledge of these is now of less importance. Indeed, there are many reasons why every attempt should be made to put as many as possible of these items into the published record.

First, many of these finds are in private collections. We are well aware that finds in such collections can often become lost or dispersed and it behooves us to try and put this material into the published and easily accessible record while the information on the finds and where they were found is still known. When combined with the rarity of known finds of such items, it is essential we maximize as much information about these items as possible and make it available to future researchers.

Second, and of course of major importance, there are numerous ways in which the individual finds, when put together with data on other finds, can specifically assist us in understanding the Paleo-Indian occupation of the province. For one thing, the distribution of points, and their mapping in relation to dated glacial features, has long been used to provide estimates of the age of these items (e.g. Jackson et al. 2000; Mason 1958; Quimby 1958). Second, we have made substantial headway in recent years in recognizing the degree of variation in fluted points and in recognizing fluted point types called Gainey, Barnes and Crowfield. Moreover, the variation we see seems to be patterned

patterned in such a manner that it lends credence to the idea that these types represent a time series or change through time (Deller and Ellis 1988, 1992; Ellis and Deller 1997). However, our Ontario samples for some types such as Gainey type points are still very inadequate. Also, as some of the examples discussed here show, there are still finds being made which do not easily fit into previously recognized types; that is, there is still variation to be documented which we have never seen before. Third, Deller (1989) has pioneered studies of the raw materials used for these items and has suggested certain trends in what sources are used through time and space and differences in raw material preferences seen in points as opposed to other items in the tools kit. Clearly, the finds reported here can be used to test and examine some of the patterns and explanations Deller (1989) has proposed. As a last example, some studies have begun to suggest that there may be variation within Ontario in the distribution of different fluted point types and this variation may have significance in terms of changes which occurred in Paleo-Indian lifeways over the time of the fluted point related occupations (Deller 1988; Deller and Ellis 1988; Ellis and Deller 1997). Indeed, in recent years there has been a growing concern with mapping the distribution and density of Paleo-Indian finds at a continental scale, not just within Ontario itself. Working with locational data to the county level in North America, for example, several studies have begun to appear which show such knowledge to have considerable potential for understanding the habitat preferences and the routes and processes by which these early groups peopled this vast area (e.g. Anderson 1990; Anderson and Faught 1998; Anderson and Gillam 2000, etc.).

So data on individual finds is essential to maximizing our information of and knowledge about Paleo-Indian peoples and in many different ways. But there are other ways I believe this effort is important. The documentation of these finds provides a means by which all individuals interested in archaeology, not just people who do archaeology for a living, can contribute to our knowledge. The documentation and reporting of these finds is something which brings out the best of an organization such as the London Chapter, and the Ontario Archaeological Society in general, where both the professional full-time archaeologist and the non-professional part-time one can contribute together to a common goal. Indeed, **KEWA** provides an excellent outlet for such reporting.

Acknowledgements: I sincerely thank all of the people who contributed to this issue of the **KEWA** and Steve Harding who did most of the photos. If there are any other individuals who have knowledge of fluted point finds which have not been previously reported or well documented, I urge them to write up these finds and submit them for publication.

The MacLeod Point: An Unusual Fluted Point from Middlesex County

by Jim MacLeod, Brian Deller and Chris Ellis

The fluted point reported here (Figure 1) is a surface find recovered from just north of the Culloden Acres site (Ellis et al. 1992) in Caradoc Township, Middlesex County, just west of London. It is a 28.3 mm long base made of Onondaga chert (Figure 1a, b). The point has a deep basal concavity (7.7 mm) bordered by wide, knobby, fishtailed ears. Thickness is 6.1 mm and basal width is 30 mm -- the widest base we have seen on a fluted point from Ontario. The lateral margins contract slightly from the flaring ears away from the base having a face-angle of 87° (see Ellis and Deller 2000: Figure 3.3). Both faces have single flutes. On one face, the first face fluted, the flute is 13.3 mm wide and extends beyond the snapped portion of the base. There are long (up to 19 mm), narrow (<5 mm) linear flakes which have been detached up both flute scar margins which have removed the pronounced flute scar ridges and flattened the basal area. The flute on the other face is short (20.4 mm) and hinge terminated just short of the snap. It has a short (10.9 mm), narrow (3.1 mm) linear flake removed from the base along the right margin to remove the lateral flute scar ridge.

In some respects, notably the thickness, the wide base, the deep basal concavity, and the fact the edges do not expand from the base, this item conforms to items assigned to the Gainey fluted point type (see Deller and Ellis 1992:34-48). On the other hand, in many ways it is atypical. Notable in this regard are the very wide base, the wide knobby well-fishtailed ears, and the contracting edges from the base. With regard to the last-named characteristic, the point actually contracts more than any Ontario point we had previously examined as measured by the face-angle (compare with Deller and Ellis 1992: Figure 35). Often, these contracting edged points, what are often called sub-triangular forms, can be a product of the reworking of broken point tips (see, for example, Fallon, this *Kewa* issue) but there is no evidence the MacLeod Point was reworked and it seems

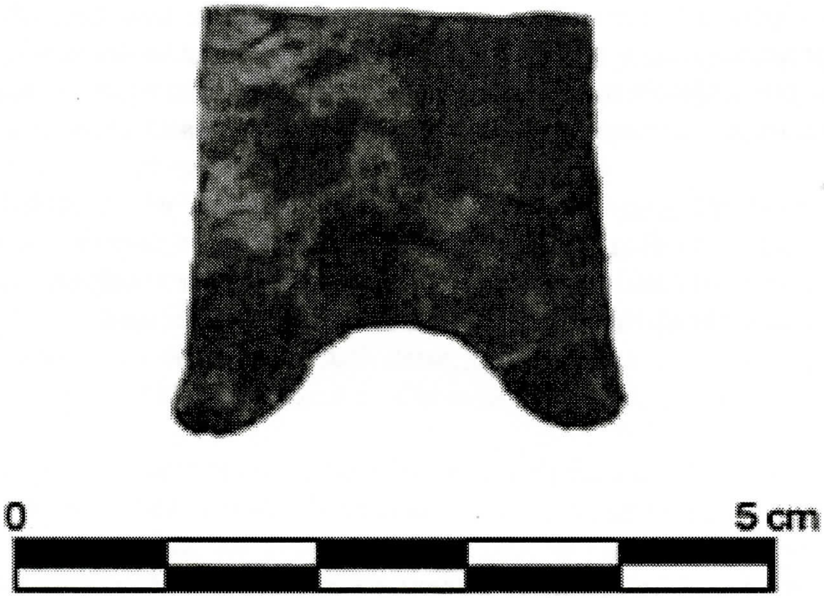

Figure 1: MacLeod Fluted Point

to have been originally made with a subtriangular outline. In any case, although the odd example of a similar form to the MacLeod point has been reported from Ontario (e.g. Garrad 1971: #41), this point seems to much more closely resemble forms most commonly reported to the east outside of Ontario. For example, there are several points from the Debert site in Nova Scotia which closely resemble the item reported here (e.g. MacDonald 1968: Plate IV:m-p, Plate VI:e).

Another Fluted Point from Caradoc Township

by Darcy Fallon

Extensive Paleo-Indian use of Caradoc Township, Middlesex County is becoming very well-documented. A number of sites have been excavated. Culloden Acres (Gainey Phase; Ellis et al. 1992) discovered by this author and Crowfield (Deller and Ellis 1984b) show occupation by Early Paleo-Indians and a Late Paleo-Indian presence is documented at the Caradoc (Holcombe-like or Hi-Ho; Deller and Ellis 2001) and Welke-Tonkonoh (Hi-Lo; Ellis and Deller 1982) sites. Many isolated finds of points have also been made. Some sites have been identified by actual point recoveries but several others have been isolated based on the recovery of other distinctive Paleo-Indian artifacts or even simple waste flakes derived from manufacture which are made on raw materials preferred by these early peoples. The point reported here was not found in association with other cultural material so it could be an isolated find but an extensive survey of the area has yet to be done. Well, enough chit-chat, let's get to the point (Figure 2).

It has a somewhat trianguloid outline, measures 45 mm in length and has a maximum width of 26 mm occurring at the slightly concave base. Usually fluted points are thickest around midpoint but this point's maximum thickness of 7 mm occurs about one third of the length from the thick, abrupt, shallowly concave (2 mm) base. On one side (Figure 2a) there is a long (33 mm) flute which hinged out very close to the tip and may suggest the point was once longer and reworked at the tip. There are also remnants of "guide flakes" on either side of the main channel that could be taken as evidence for the use of the Enterline fluting technique as described in areas to the south by Witthoft (1952). Both side edges near the base and the base itself are moderately ground and the tip exhibits what is probably a slight impact fracture.

Given its overall shape, the point here superficially resembles a Late Woodland Glen Meyer form. However, the definite flute on one face, the workmanship and the basal and side grinding clearly indicate it is a Paleo-Indian point. Although it is a fluted point, the point is intriguing in that its trianguloid shape is one which is rarely seen in southwestern Ontario although comparable rare examples are reported in surrounding areas such as Michigan (e.g. Mason 1958: Plate 1B, IID, IIIC, etc.) and New York (e.g. Gramly 1988: Figure 7-1) where they are often characterized as "sub-triangular." There is some questions as to its material, either Bayport chert or a lightly patinated Selkirk chert. Both cherts were employed by Paleo-Indians in Ontario although Selkirk is only rarely used. As suggested by one of the leading experts, the point here could be a reworked tip. Similar forms are reported from sites east of the Great Lakes dominated by large (e.g. thick and very wide) relatively parallel-sided like Debert, Nova Scotia (MacDonald 1968)and Bull Brook, Massachusetts (Byers 1954) because even a snapped tip would have the apparently desired wide base (e.g. >20 mm) of these forms. Comparable initial forms are called Gainey points in the Great Lakes region (e.g. Deller and Ellis 1992). If a tip with contracting edges was broken off such a large point and then simply rebased for reuse it would resemble this form and may even be only fluted on one face if it broke beyond the flute – at several sites unresharpened points tend to have much longer flutes on one face than the other (e.g. Deller and Ellis 1992: Figure 21) such that a snapped off tip would only have fluting on one face. Also, the shallowness of the basal concavity and the atypical rather thick abrupt base could suggest a simply rebased tip. Reworking of tips in the manner has been documented on other sites with large points (e.g. Morrow 1995:181).

Another leading expert has suggested its is not reworked but a previously unreported fluted point type so prepare yourselves for a heated but civilized debate. On one side will be those shouting reworked point tip while the other side, those who are able to think outside the basket, scream new point type – let the discussions begin!!!

A Paleo-Indian Surface Find in Northern Middlesex County

by Robert Bright

The basal section of a fluted biface was found just east of the Parkhill site in Middlesex County. Although only about one third of the Onondaga chert biface remains (Figure 3), enough diagnostic information is exists to study this artifact and particularly since it is the basal section, the most diagnostic section of fluted bifaces, which survives.

The first feature which stands out is its size. It appears somewhat larger than any other point I have read about. The large (8.2 gram) fragment measures 33 mm at the base and around mid-section it must have been at least 45 mm wide. The concavity at the base measures 5 mm deep and the biface has a maximum thickness at one point of 9 mm although it is around only 6.5 mm thick maximum over most of the surface. Although this may seem somewhat thick, the biface must have had a width to thickness ratio at the time it was broken of greater than 5 to 1 which is a sure sign of an excellence in flint knapping. The biface is definitely fluted on one face and the flute extends to the break so it must have been over 30 mm long. The lateral edges expand very markedly from the base so that it has a face-angle of about 116°. It is notable that the lower lateral edges have not been ground smooth to prevent the sharp edges from cutting haft binding. Also, there is a noticeable projection along the longest remaining lateral edge which seems to have been deliberately "built-in" to the biface for purposes of using it as a striking platform from which to remove a flake to thin the item. These "isolated platforms," which allow one to carefully focus the force of the blow and remove large thinning flakes, have been reported on fluted preforms (e.g. unfinished points) at other sites (e.g. Gramly 1993; Morrow 1995:173). Such careful platform preparation would be necessary to make

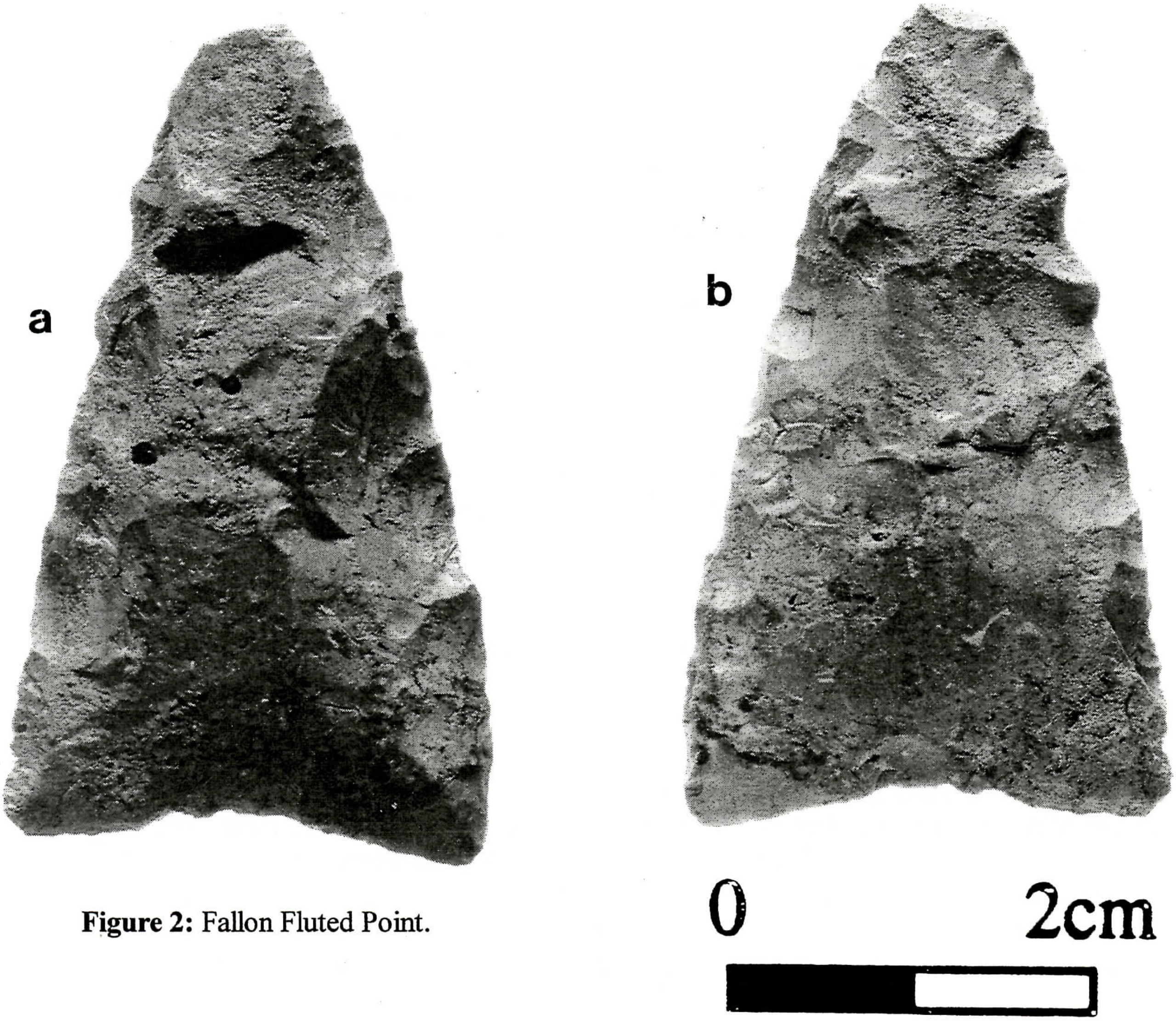

Figure 2: Fallon Fluted Point.

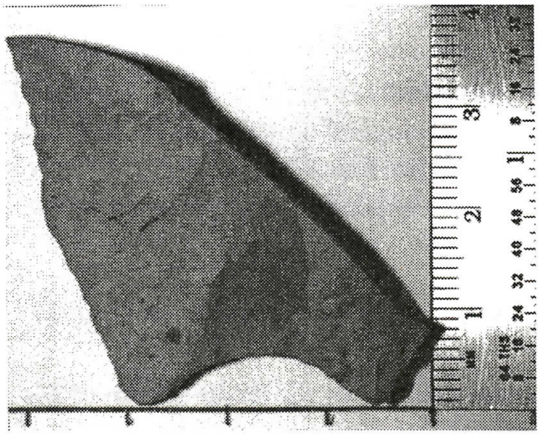

Figure 3: Bright Fluted Biface.

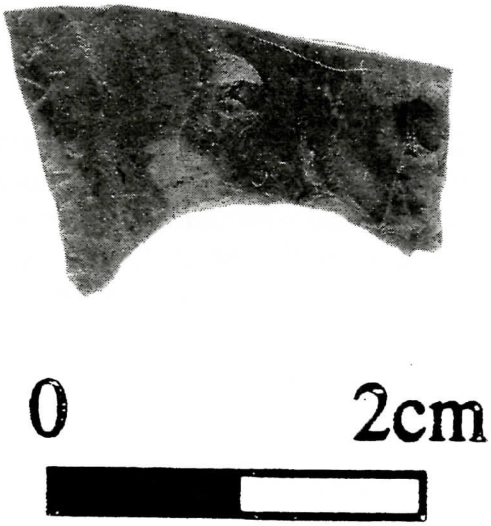

Figure 4: AfHf-21 Crowfield Point.

a wide yet very thin biface such as this example.

Taking the isolated platform and lack of lateral grinding into consideration, I think it is reasonable to conclude that this point was broken in manufacture and discarded. The thinness of the biface, its high width to thickness ratio, and its markedly expanding lateral edges from the base make it a clear example, albeit a very large one[1] even taking into consideration the fact it is unfinished, of the very rare Crowfield style of fluted point (see Deller and Ellis 1984 a, 1984b). It is also notable that the point is on Onondaga as are many other Crowfield style fluted points in southwestern Ontario (e.g. Deller and Ellis 1984b, 1996) and this preference is in contrast to the predominant use of Fossil Hill (Collingwood) chert for presumably earlier Barnes point forms in the area including the nearby Parkhill site (Deller and Ellis 2000).

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[1] Editor's Note: Comparable large Crowfield-like points have been described to Ellis from sites in Pennsylvania by Dr. D. Brian Deller but this is the first inkling such bifaces may also occur in Ontario.

Three Crowfield Points from Southeast Middlesex County

by James R. Keron and Shari L. Prowse

This report documents three Early Paleo-Indian fluted point sites found during surveys within southeastern Middlesex County, Ontario. More comprehensive descriptions of these sites and artifacts can be found in the relevant license reports (Keron 1977, 2000; Prowse and Keron 2000). Although these sites are represented by isolated finds, each consisting of a single Crowfield fluted point (Deller and Ellis 1984a), they are considered significant in that they provide insight into the little known Crowfield phase as well as Paleo-Indian occupations away from fossil beach ridges.

AfHf-21

History of investigations

This Crowfield fluted point fragment was recovered during a pedestrian survey by the authors in the summer of 1998 (Prowse and Keron 2000). It was located in a ploughed agricultural field in the northeastern end of a multi component site. No other identifiable Paleo-Indian artifacts were recovered within the vicinity of this original find and there did not appear to be any concentration of flakes in the immediate area of the site.

Description of Environment

The site is located on a ridge above the flood plane, along the south side of the south branch of the Thames river, east of Dorchester, Ontario. The soil is Plainfeild Sand. Continuous ploughing has destroyed all natural vegetation on the site proper, however, a review of the 19th century survey records indicates that the predominant forest cover was previously maple and beech (Findlay 1977) Along the northern boundary of the site the ridge slopes steeply down to the flood plane. The ground also slopes to the south, east and west albeit much more gently. The site is thus on the high point with drainage in all directions. It is located at the eastern most end of the Caradoc Sand Plain and just north of the of the Mount Elgin Ridges (Chapman and Putnam 1984). Further to the south and west of the site is an area known locally as the "Dorchester swamp" which contains black muck soil. The Thames river is located roughly 500 metres to the northwest of the site but may have taken other courses over the flood plane in antiquity.

Artifact Description

This artifact is the basal portion of a Crowfield fluted point (Figure 4) which was manufactured on Onondaga chert. The attribute data for this artifact is presented in Table 1 and fits well within the type definition. The presence of a potlid on each face suggests that it has been subjected to some burning or heating which is characteristic of Crowfield points as noted above. This point was finished and is fluted on both faces with each face containing three flutes, however, the length of the fluting cannot be determined since the flutes extend beyond the break point. The basal concavity is 4 mm and the point has been ground on both lateral edges and the basal concavity. Lateral trimming is present on only one face.

Evaluation of Significance

This site is an isolated find spot represented by the basal portion of a Crowfield fluted point. This site was most likely a camp site to which this point fragment was brought back, most likely attached to dart shaft which was recovered for reuse. A new projectile tip was most likely then fitted to the haft at the camp site and the original base then discarded.

AfHg-8

History of Investigations

This Crowfield fluted point was discovered in the spring of 1997 during a pedestrian survey of a ploughed agricultural field. It was located along the northern edge of a multi-component site that was previously discovered by Keron in 1973 during a survey of that same field (Keron 1986). Despite a careful search of the immediate vicinity, no other identifiable Paleo-Indian artifacts were recovered. Also, no flake clusters were evident that could be unambiguously attributed to Paleo-Indian activities.

Description of Environment

The site is located within a field that has been used for agriculture for over a century. Guelph Loam is the predominate soil type within this area. Continuous ploughing has destroyed all natural vegetation within the vicinity of the site, however, a review of a 19th century survey within this region indicates that the predominant forest cover was previously maple and beech (Findlay 1977). The site lies on the eastern bank of a small creek in the Dingman Creek drainage on the crest of a ridge which drops three metres to the flood plain. About a half of a kilometer to the west of the site is found a large area of swamp land originally formed in a shallow glacial kettle. The current forest cover within this swampy area consists of willow, ash, silver maple and elm. This area contains black muck soil which is one of the features that typify Paleo-Indian site locations (Deller 1979). A number of years ago, when he was younger and more energetic, Keron dug a test trench at the edge of the muck soil revealing layered sediments containing shell suggestive of deposits at the bottom of standing water. This area was most likely a shallow lake during much of prehistoric times.

Artifact Description

This point is complete and both faces are shown on Figure 5. Attribute data for this artifact is presented in Table 1. The point differs somewhat from the majority of the points recovered from the Crowfield Site (Deller and Ellis 1984b). Firstly, it is made of Collingwood chert while the majority of Crowfield points recovered have been made from Onondaga. Secondly and more unusual, it is fluted on only one face with the other face retaining some of the cortex from the original flake blank along the central ridge (Figure 4b). The presence of cortex indicates that the chert was acquired at the primary outcrop approximately 200 km to the north of the site. This is consistent with overall Paleo-Indian chert acquisition patterns (Ellis 1989). Thirdly, this point differs from the earlier pattern in that the original flake blank was removed from the surface paralleling the bedding plain as opposed to the exposed surface of the block which would be at right angles to the bedding plain. This is contrary to the documented Paleo-Indian practice from slightly earlier times of manufacturing points from Collingwood chert where the blank would be removed from the original block perpendicular to the cortical surface of the bedding plain (Deller and Ellis 1992). Ellis (personal communication, 2000) notes that Crowfield Points tend to be more randomly oriented on Collingwood chert than were the earlier Barnes points. In terms of its dimensions, this point falls within the lower range of the variation described by Deller and Ellis (1984a) with its basal width, measuring 11 mm, being below the minimum 13 mm described in the type definition (See Table 1 for metrics). This point also has a tendency towards a shoulder and asymmetrical rersharpening on one edge as described by Deller and Ellis (1984b: 44-45). They suggest that artifacts such as this were not likely projectile tips but represent a hafted knife.

Evaluation of Significance

This complete point represents the sole Paleo-Indian artifact from this site. If the artifact is a projectile point then it could represent a hunting loss. However, it more closely resembles the shouldered bifaces from the Crowfield site and the presence of cortex on one face suggest that it is more likely a hafted knife. This evidence, plus the fact there are a number of Paleo-Indian sites in the area would indicate that this find represents a campsite or workstation.

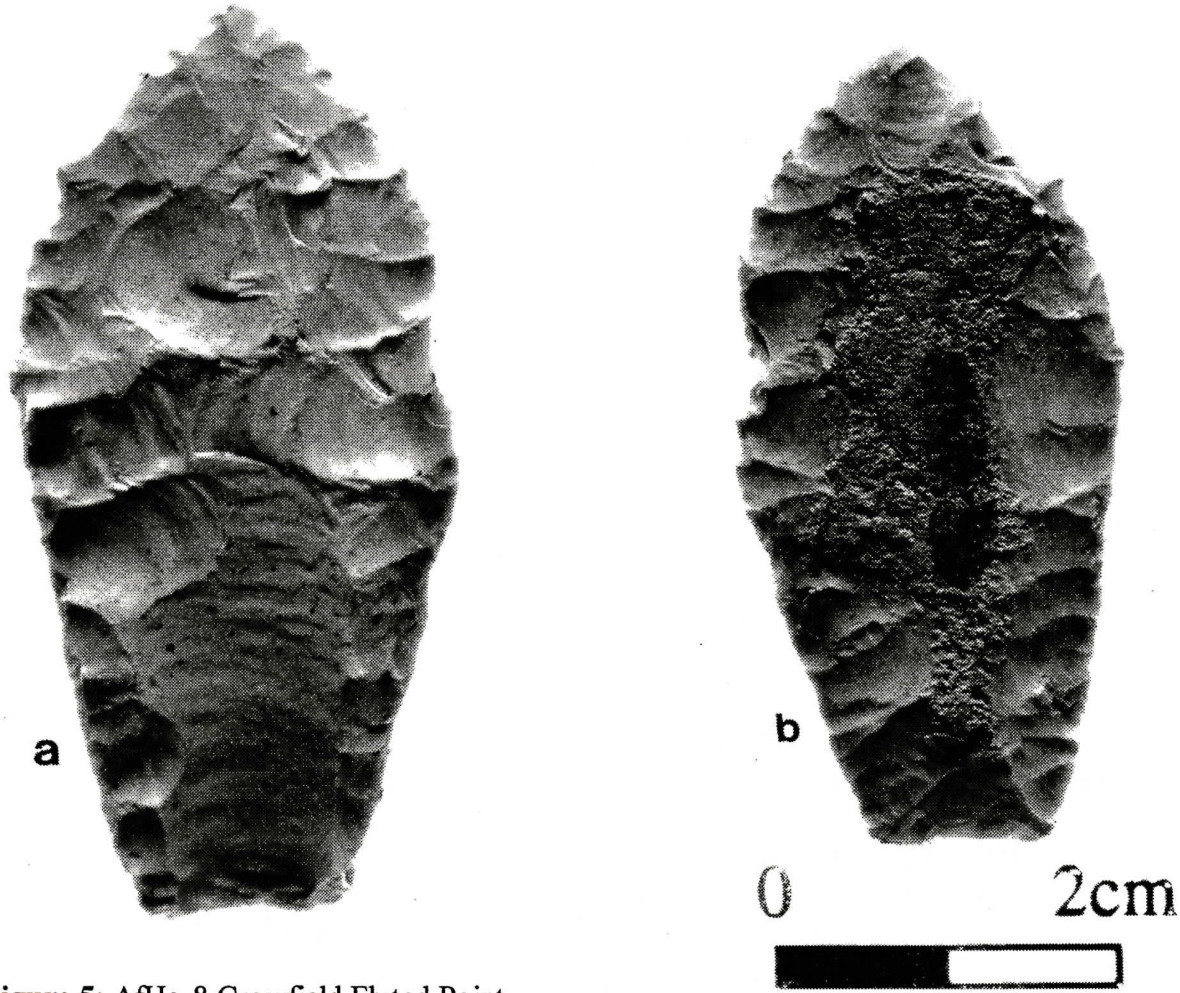

Figure 5: AfHg-8 Crowfield Fluted Point.

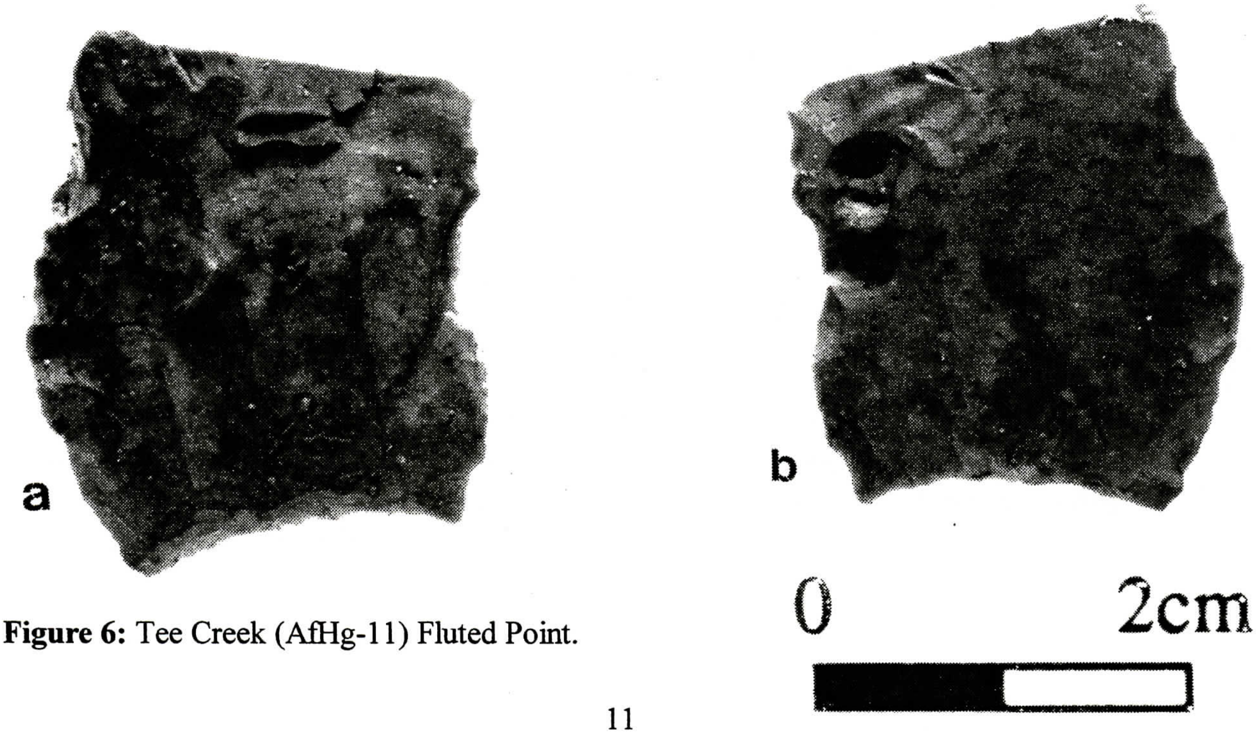

Figure 6: Tee Creek (AfHg-11) Fluted Point.

AfHg-11

History of Investigations

This Crowfield fluted point fragment was discovered during a 1976 pedestrian survey of a ploughed agricultural field (Keron 1977) and has been referenced in the Paleo-Indian literature as T-Creek (e.g. Deller and Ellis 1992:151). Since this initial discovery, the area in the vicinity of this find has been examined several times by Keron, however, no additional Paleo-Indian artifacts have been recovered. The artifact was discovered within a field located on the opposite side of the creek and roughly 200 metres west of AfHg-8, but closer to the swampy area mentioned above.

Description of Environment

Although the field containing the site was cleared for agricultural use in the last century, it has not been subjected to as much ploughing. Until roughly 1970, the land surrounding the site was used as an apple orchard. Keron recalls as a child spending an afternoon digging in the orchard searching for Indian arrowheads, fortunately without success.

Artifact Description

The artifact, illustrated on Figure 6, consists of the basal section of a Crowfield fluted point made of Onondaga chert. Attribute data for this artifact is presented in Table 1. Although it is fluted on both faces, one face has flutes which run past the breakpoint and the other face has two shorter flutes that terminate before the break point. The measurements for the shorter flutes are 20 mm and 13 mm respectively. The measurement for the expanding angle should be considered a rough estimate given that only a small portion of one lateral margin is intact. The occurrence of small pot-lids on one face suggests that at some time this point was subjected to heating, a common occurrence on Crowfield points (Ellis: personal communication, 2000). The point appears unfinished as indicated by the lack of grinding of the basal concavity and the lateral margins so it may have been broken during manufacture. Although it could be the result of a plough strike, there appears to be retouch along one lateral edge which could have been the result of this artifact being used as a scraper. Rather than discarding this artifact altogether, the need to curate scarce lithic resources may have resulted in its use as a scraper.

Evaluation of Significance

This site is an Early Paleo-Indian isolated find spot represented by the basal portion of a Crowfield fluted point. Although AfHg-8 and AfHg-11 are located within 200 metres of each other, their relationship to one another is unclear. They are both camp sites, however, the temporal relationship between these sites is unknown. The observation that the creek lies between both sites suggests that these sites represent independent camp sites that were occupied by people following a scheduled seasonal round.

Table 1. Point Attributes

Site	Length	Width	Thick	Base Width	Flute Length Side A	Flute Length Side B	Depth Basal Concavity	Edge Angle (Avg)	Lateral Grinding	Basal Grinding	Chert Type
AfHg-8	48 mm	24 mm	4 mm	11 mm	24 mm	absent	<0.5mm	103 deg	light	light	Collingwood
AfHg-11	broken at 28 mm	broken at 25 mm	4 mm	16 mm	20 mm	>25mm	1.5mm	107 deg	none	none	Onondaga
AfHf-21	broken at 16 mm	broken at 24	3.5 mm	20 mm	present but broken	present but broken	4 mm	100 deg	light	light	Onondaga

Conclusions

AfHg-8 and AfHg-11 are two of six known Paleo-Indian components found within three kilometres of each other in Westminster Township. Two of the other sites, AfHg-3 and AfHg-13, are represented by three trianguloid end scrapers, two made from Collingwood chert and the other from Bayport (or maybe Selkirk chert). The third site, AfHg-4, contains two components. The first is a point making area that has yielded two fluted point rejects, a number of channel flakes, and other debitage. The second component located about 100 meters south consists of a single Collingwood chert trianguloid end scraper. Although the points from AfHg-4 are made on Onondaga and Selkirk chert, Collingwood and Bayport chert was found among the debitage.

AfHf-21 is one of three know Paleo-Indian components in North Dorchester Township. AfHg-24 (Keron 1986) contains a single Collingwood chert scraper and AfHg-28 (Keron, 1984) has yielded a backed knife and a beaked scraper.

To date, Crowfield sites have been few and far between. Besides the type site, Deller and Ellis (1984b) note the existence of some isolated finds in Ontario and their similarity to material from New York State. Timmins (1994) reports the salvage excavation of a small Crowfield site and Deller and Ellis (1996) describe the Bolton Site another Crowfield Phase site in Middlesex County. Despite the small number of artefacts, the three Crowfield sites discussed within this paper can allow for comparative work that can lead to inferences concerning Early Paleo-Indian lifeways. The common factor of these three sites seems to be their extremely ephemeral nature. All three sites are represented by a single point. No other identifiable Paleo-Indian material or even recognizable concentrations of detritus were observed within the vicinity of the original finds. Given the paucity of occupational debris, these camp sites have been interpreted as single use sites occupied for a short period of time by small, highly mobile bands. A model presented by Ellis and Deller (2000) suggests that the beach ridge sites such as Parkhill represent summer occupations where people gathered for resource exploitation. It has also been proposed that during the winter, these summer camps disperse into family units to exploit seasonally mobile resources such as caribou. The three sites discussed within this paper, given their location away from fossil beach ridges and their short occupation period, may provide evidence for the winter component of this model.

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